



Dart Hawkesbury
1270 Aberdeen St Hawkesbury, ON K6A 1K7 Canada
Tel (613) 632-5200

Purchasing Receipts

PO No	Supplier	Line Item No	Rel No	Terms	Purchased Item	Description	For Part No	Project	Equipment ID	Order Qty	Due Date	Received Quantity	Accounting Job No	Serial No	Status	Receive Date	Price/Unit	Aging Days	Past Due	Total	Supplier Name
PO038050	ACI001-VC	1	1	Net 30	M4140NB0.500x0.500	4140 Steel Bar 0.500 X 0.500 : AISI 4140N STEEL BAR PER MIL-S-5626, AMS 6382, AMS 6349, AMS 6529				6	10/20/2017	12		S007089	Stock	11/6/2017	\$ 39.17 / ft	0		\$470.00	Acier Ouellet Inc.
		2			MT-41L40-R1.500	AISI 41L40 Leaded Steel Round Bar 1.500" Dia.				12		12		S007114	Stock	11/6/2017	\$ 34.00 / ft	0		\$408.00	Acier Ouellet Inc.
		3			M7075T6R1.750	M7075T6R1.750 : MATERIAL: 7075-T6 OR T651/T6510/T6511/T62 ROUND BAR AS PER AMS-QQ-A-225/9 OR AMS 4122/4123/4124/4186/4187 OR PER AMS QQ-A-200/11					10/26/2017	12		S007090	Stock	11/6/2017	\$ 47.92 / ft	0		\$575.00	Acier Ouellet Inc.
		4			MT-4140QT-R0.625	AISI 4140 Quenched & Tempered Steel Round Bar 0.625" Dia.				3	10/20/2017	3		S007115	Stock	11/6/2017	\$ 14.00 / ft	0		\$42.00	Acier Ouellet Inc.
		5			MT-4140QT-R1.000	AISI 4140 Quenched & Tempered Steel Round Bar 1.000" Dia.						3		S007126	Stock	11/6/2017	\$ 18.33 / ft	0		\$55.00	Acier Ouellet Inc.
		6			M6061T6B0.500X7.000	6061T6 Bar 0.500 X 7.000 : MATERIAL: 6061-T6/T651/T6510/T6511/T62 ALUMINUM BAR PER QQ-A-225/8 OR AMS-QQ-A-225/8 OR AMS 4117/4128/4115/4116 OR QQ-A-200/8 OR AMS-QQ-A-200/8 OR AMS 4160 OR ASTM B211 OR ASTM B221				7		6		S007092	Stock	11/6/2017	\$ 17.14 / ft	0		\$102.86	Acier Ouellet Inc.
		7			M6061T6TR4.0X2.0W125	6061-T6 Rect Tube 4.0 X 2.0 X .125W : MATERIAL: 6061-T6 OR 6061-T651/T6510/T6511/T62 RECTANGULAR TUBING PER AMS-QQ-A-225/8 OR AMS 4117/4128/4115/4116 OR PER AMS-QQ-A-200/8 OR AMS 4160				20		20		S007093	Stock	11/6/2017	\$ 4.98 / ft	0		\$99.50	Acier Ouellet Inc.
		8			MT-A513-T-0.500W0.0625	A513 Seamless Alloy Steel Round Tubing 0.500" dia. x 0.0625" Wall						19		S007127	Stock	11/6/2017	\$ 2.03 / ft	0		\$38.36	Acier Ouellet Inc.
Total:										83		87								\$1,404.76	

Plex 11/6/2017 2:17 PM Dart Plouffe Sonia

MT 1144 2100
5007116



Dart Hawkesbury
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER PO038050

Supplier: ACI001-VC
Acier Ouellette Inc.
935 Boul. Du Havre
Valleyfield
QC
J6S 5L1 Canada
Phone: 800 667 4248
Fax: 450 377 5696

PO No: PO038050
PO Date: 10/16/17
Due Date: 10/20/17
**Purchase Order
Revision:**
Revision Date:
Ship-To Contact: Lavoie, Chantal
Phone: clavole@dartaero.com

Ship To: 1270 Aberdeen Street
Hawkesbury
ON
K6A 1K7 Canada
Phone: 613-632-5200

Via: Ground
Pynt Terms: Net 30
Freight Terms:
Special Comments:

Items													
Line Item	Part	Rev	Supplier Part No	Item No	Description	Item Tax	Status	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
1	M4140NB0.500x0.500	-			4140 Steel Bar 0.500 X 0.500 : AISI 4140N STEEL BAR PER MIL-S-5626, AMS 6382, AMS 6349, AMS 6529		Firmed	10/20/17	6 ft	0 ft 12 ft	6 ft	\$39.1666/ft	\$235.00
2	MT-41L40-R1.500	✓	DAS 9		AISI 41L40 Leaded Steel Round Bar 1.500" Dia.		Firmed	10/20/17	12 ft	0 ft 12 ft	12 ft	\$34.00/ft	\$408.00
3	M7075T6R1.750	✓	9-89		M7075T6R1.750 : MATERIAL: 7075-T6 OR T651/T6510/T6511/T62 ROUND BAR AS PER AMS-QQ-A-225/9 OR AMS 4122/4123/4124/4186/4187 OR PER AMS QQ-A-200/11		Firmed	10/26/17	12 ft	0 ft 12 ft	12 ft	\$47.9166/ft	\$575.00
4	MT-4140QT-R0.625	✓	DAS 9		AISI 4140 Quenched & Tempered Steel Round Bar 0.625" Dia.		Firmed	10/20/17	3 ft	0 ft 3 ft	3 ft	\$14.00/ft	\$42.00
5	MT-4140QT-R1.000	✓	DAS 9		AISI 4140 Quenched & Tempered Steel Round Bar 1.000" Dia.		Firmed	10/20/17	3 ft	0 ft 3 ft	3 ft	\$18.333/ft	\$55.00
6	M6061T6B0.500X7.000	-			6061T6 Bar 0.500 X 7.000 : MATERIAL: 6061-T6/T651/T6510/T6511/T62 ALUMINUM BAR PER QQ-A-225/8 OR AMS-QQ-A-225/8 OR AMS 4117/4128/4115/4116 OR QQ-A-200/8 OR AMS-QQ-A-200/8 OR AMS 4160 OR ASTM B211 OR ASTM B221		Firmed	10/20/17	7 ft	0 ft 6 ft	7 ft	\$17.142857/ft	\$120.00
7	M6061T6TR4.0X2.0W125	-			6061-T6 Rect Tube 4.0 X 2.0 X .125W : MATERIAL: 6061-T6 OR 6061-T651/T6510/T6511/T62 RECTANGULAR TUBING PER AMS-QQ-A-225/8 OR AMS 4117/4128/4115/4116		Firmed	10/20/17	20 ft	0 ft 20 ft	20 ft	\$4.975/ft	\$99.50



Dart Hawkesbury
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER PO038050

Items													
Line Item	Part	Rev	Supplier Part No	Item No	Description	Item Tax	Status	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
8	MT-A513-T-0.500W0.0625				OR PER AMS-QQ-A-200/8 OR AMS 4160 A513 Seamless Alloy Steel Round Tubing 0.500"dia. x 0.065" Wall		Firmed	10/20/17	20 ft	0 ft	20 ft	\$2.0295/ft	\$40.59
Grand Total:												\$1,575.09	

Order Notes
<p>Procurement Quality Clauses A005 right of entry A012 chemical and physical test report A016 personnel qualification A017 raw material identification (as applicable) A026 certification of material conformance A041 quality management system A042 dart notification by supplier A043 retention of quality documents</p> <p>Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit www.dartaerospace.com for further explanation.</p>

Plex 10/16/17 3:11 PM dart.lavoie.chantal

88 1711-6



DELIVERY - CLIENT

Copy CO00056725

ACIER OUELLETTE INC.

935, Boul. du Hâve
Salaberry de Valleyfield (Québec) J6S 5L1
Tél.: 450-377-4248 Mtl: 514-336-4248 Ext.: 800-667-4248
Fax: 450-377-5696 Mtl: 514-336-4246 Ext.: 866-456-4242

Customer N°

CL10001056

Date

2017/10/16

Delivery date

2017/10/26

Your order N°

038050

Processed by

Josianne Bourdon

Salesman

Carrier

OUELLETTE VALLEYFIELD

Credit Terme

Net 30 Days

Billed to

DART AEROSPACE LTD
1270, ABERDEEN ST.
HAWKESBURY, Ontario, K6A 1K7

Shipped to

, Ontario,

Att : CHANTAL LAVOIE Tél.: 613-632-5200

Instruction F-M

Delivery Route 5

Page

1

Product Description	Weight	Qty	U/M	PCS NB			Internal Use Only				
				CMD	EXP	B/O	IN	I	S	C	OUT
1 SQUARE 4140 1/2 SPH ANN NS C4140-12A 9235 1 X 12' AC10294-JG-25/10 HEAT: 10466150 1	10.00	12.00	PI		12						
2 ROUND 4140 ANNEALED 1 1/2 RANDOM R4140-112A-V 4891	90.12	15.00	PL \$CLB								
1 X 15' HEAT-014580 COUPE A LA SCIE 1 SCIE 9-80 TRANSFERT ST-JEROME LE 26/10		1.00	UN								

NIR : R-109516-6

Next Page...



ACIER OUELLETTE INC.

DELIVERY - CLIENT

Copy CO00056725

935, Boul. du Hâvre
Salaberry de Valleyfield (Québec) J6S 5L1
Tél.: 450-377-4248 Mtl: 514-336-4248 Ext.: 800-667-4248
Fax: 450-377-5696 Mtl: 514-336-4246 Ext.: 866-456-4242

Shipped to

Billed to
DART AEROSPACE LTD
1270, ABERDEEN ST.
HAWKESBURY, Ontario, K6A 1K7

, Ontario,

Alt : CHANTAL LAVOIE Tél.: 613-632-5200

Delivery Route 5

Customer N° CL10001056
Date 2017/10/16
Delivery date 2017/10/26
Your order N° 038050
Processed by Josianne Bourdon
Salesman
Carrier OUELLETTE VALLEYFIELD
Credit Terme Net 30 Days
Page 2

Product Description	Weight	Qty	U/M	PCS NB			Internal Use Only				
				CMD	EXP	B/O	IN	I	S	C	OUT
4 ROUND ALU 1 3/4 7075-T6 NS . RAL7075T6-134 9245 1 X 12' AC10312-JG-25/10 HEAT: 10059056 ✓ 5 7075 T6 1 3/4" DIA N 1 X 12' 6 TUBE MEC 0.500 OD X .065 RANDOM TME-0500065-V 6745 DAS 1 X 20' R/L HEAT: F686891 TRANSFERT ST-JEROME LE 18/10 9-06	33.90	12.00	PI								
	6.04	20.00	PI_SCP1								

NIR : R-109516-6

Next Page...



ACIER OUELLETTE INC.

DELIVERY - CLIENT

Copy CO00056725

935, Boul. du Hâvre
Salaberry de Valleyfield (Québec) J6S 5L1
Tél.: 450-377-4248 Mtl: 514-336-4248 Ext.: 800-667-4248
Fax: 450-377-5696 Mtl: 514-336-4246 Ext.: 866-456-4242

Shipped to

, Ontario,

Billed to
DART AEROSPACE LTD
1270, ABERDEEN ST.
HAWKESBURY, Ontario, K6A 1K7

Alt : CHANTAL LAVOIE Tél.: 613-632-5200

Delivery Route 5

Page

3

Customer N° CL10001056
Date 2017/10/16
Delivery date **2017/10/26**
Your order N° 038050
Processed by Josianne Bourdon
Salesman
Carrier
Credit Terme
Net 30 Days

OUELLETTE VALLEYFIELD

Net 30 Days

Product Description	Weight	Qty	U/M	PCS NB			Internal Use Only			
				CMD	EXP	B/O	IN	I	S	C
8 ROUND 4140 5/8 QT NS R4140-58QT 9236 1 X 3' AC10291-FU-19/10 HEAT: <u>LETTRE CONF.</u> R4140-1QT 9237	3.12	3.00	PI							
9 ROUND 4140 1 QT NS R4140-1QT 9237 1 X 3' AC10291-FU-19/10 HEAT: <u>INF14203087</u> FAL-127 9238	8.01	3.00	PI_\$CLB							
10 FLAT ALU 1/2 X 7 6061-T651 NS FAL-127 9238 1 X 6' AC10292-TH-23/10 HEAT: 13-2217	26.00	6.00	PI_\$CLB							

NIR : R-109516-6

Next Page...



ACIER OUELLETTE INC.

DELIVERY - CLIENT

Copy CO00056725

935, Boul. du Hâve
Salaberry de Valleyfield (Québec) J6S 5L1
Tél.: 450-377-4248 Mtl: 514-336-4248 Ext.: 800-667-4248
Fax: 450-377-5696 Mtl: 514-336-4246 Ext.: 866-456-4242

Customer N°

CL10001056

Date

2017/10/16

Delivery date

2017/10/26

Your order N°

038050

Processed by

Josianne Bourdon

Salesman

Carrier

OUELLETTE VALLEYFIELD

Credit Terme

Net 30 Days

Page

4

Billed to

DART AEROSPACE LTD

1270, ABERDEEN ST.
HAWKESBURY, Ontario, K6A 1K7

Shipped to

, Ontario,

Att: CHANTAL LAVOIE Tél.: 613-632-5200

Instruction F-M

Delivery Route 5

Product Description	Weight	Qty	U/M	PCS NB			Internal Use Only			
				CMD	EXP	B/O	IN	I	S	C
11 TUBE ALU 4 X 2 X .125 6061-T6 R RANDOM TAL-4212SR-V 6386 1 X 20' HEAT: 69967 ~	33.62	20.00	PL_\$CLB							

Total Weight (lbs) : 210.81

NIR : R-109516-6

Conditions :
All sold and delivered materials remain the property of "Acier Ouellette Inc" until payment is made in full, complete and cashed. All test materials are at the buyer's expense. The warranty offered by "Acier Ouellette Inc" is the same as offered and honored by the manufacturer and this warranty is transferred by "Acier Ouellette Inc" to the client. The buyer hereby accepts to respect the following conditions: Net 30 days from billing date and the buyer accepts to pay administration charges of 2% per month (24% per annum) on all past due amounts over 30 days. Any default in respect with this contract will lead to payment by acceleration and permits to the seller, at his choice to claim for the balance due or the repossession of the goods sold. All claims must be made within five (5) days with this document enclosed. Any merchandise that has been damaged, cut or modified cannot be returned. All goods returned must be with our authorization and are subject to a 25% restocking charge.

Prepared By : Verified By :

Delivered By : Time

Customer's Signature

Date

Total (\$CAD)

ACIER OUELLETTE INC.
935, Boul. du Hâvre
Salaberry de Valleyfield (Québec) J65 5L1
Tél.: 450-377-4248 Mtl.: 514-336-4248 Ext.: 800-667-4248
Fax: 450-377-5696 Mtl.: 514-336-4246 Ext.: 866-456-4242

Customer N°	CL10001056
Date	2017/10/16
Delivery date	2017/10/26

DELIVERY - SCIE (4)

Copy C000056725

Billed to

DART AEROSPACE LTD
1270, ABERDEEN ST.
HAWKESBURY, Ontario, K6A 1K7

Shipped to

Ontario,

Instruction	F-M
-------------	-----

Att : CHANTAL LAVOIE Tél.: 613-632-5200
Delivery Route 5

Page

1

Credit Terme

Net 30 Days

Carrier

~~QUELLETTE VALLEYFIELD~~

Salesman

Josianne Bourdon

Processed by

Your order No.

038050

Delivery date

2017/10/26

Date _____

2017/10/16

Customer №

CLJ0001056

Copy

CO000056725

Product Description	Weight	Qty	U/M	PCS/NB			Internal Use Only			
				CMD	EXP	B/O	IN	I	S	C
1 ROUND 4140 ANNEALED 1 1/2 RANDOM R4140-112A-V 4891	90.12	15.00	PL_SCLB							
1 X 15" HEAT: 014580 COUPE A LA SCIE SCIE 1		1.00	UN							

Total Weight (Lbs): 90.12

NIR : R-109516-6

All sold and delivered materials remain the property of "Acier Quetteite Inc." until payment is made in full, complete and cashed. All lost materials are at the buyer's expense. The warranty offered by "Acier Quetteite Inc." is the same as offered and honored by the manufacturer, and this warranty is transferred by "Acier Quetteite Inc." to the client. The buyer hereby accepts to respect the following conditions: Net 30 days from billing date and the buyer accepts to pay administrative charges of 2% per month (24% per annum) on all past due amounts over 30 days. Any default in respect with this contract will lead to payment by acceleration and permits to the seller, at his choice to claim for the balance due or the repossession of the goods sold. All claims must be made within five (5) days with this document enclosed. Any merchandise that has been damaged, cut or modified cannot be returned. All goods returned must be with our authorization and are subject to 25% resending charge.

Conditions :
 Total Weight (Lbs) : 90.12
 NIK : K-109516-b

Total (\$CAD)

Prepared By :	Verified By :
---------------	---------------

Delivered By :	Time
----------------	------

Y
N
D

Customer's Signature

Date _____

CO. 26725
CERTIFICATE OF TEST
CERTIFICAT D'ESSAIS

Certification Date
25-OCT-2017

CUSTOMER ORDER NUMBER
NUMÉRO DE COMMANDE DU CLIENT

Invoice Number
T371712

AC00010294
PART NUMBER/NUMÉRO DE PIÈCE
562565

SOLD TO: ACIER OUELLETTE INC. SHIP TO: ACIER OUELLETTE INC.
VENDU À: DIVISION SALABERRY DE VALLEYFIELD DIVISION SALABERRY DE VALLEYFIELD
935, BOUL. DU HAVRE 935, BOUL. DU HAVRE
SALABERRY-DE- VALLEYFIELD QC J6S 5L1 SALABERRY-DE- VALLEYFIE QC J6S

Description: 4140/42 CR SPH ANN BARS ASTM A108
1/2 SQ X 12" R/L Line Total: 10.212 LB
HEAT: 10466150 ITEM: 562565

Specifications:
ASTM A331 ASTM A108 13 ASTM A322 07

RCPT: R122254

COUNTRY OF ORIGIN : USA

END-QUENCH HARDENABILITY (JOMINY - RC)

1	2	3	4	5	6	7	8	9	10	12	14	16	32
57	57	57	57	57	57	57	55	54	53	50	48	46	38

GRAIN SIZE : 5 -

17/11/02

The above data were transcribed from the manufacturer's Certificate of Test after verification for completeness and specification requirements of the information on the certificate. All test results remain on file subject to examination. /Les informations ci-haut-mentionnées sont transcrites du certificat d'essais du manufacturier après vérification de l'état complet des spécifications inscrites sur le certificat. We hereby certify that the material covered by this report will meet the applicable requirements described herein, including any specification forming a part of the description. /Par les présentes, nous certifions que le matériel couvert par ce rapport rencontre les spécifications décrites ci-haut.
The willful recording of false, fictitious, or fraudulent statements in connection with test results may be punishable as a felony under federal statutes. /Les informations fausses, fictives ou frauduleuses en rapport avec le résultat des essais sont punissables en vertu des lois fédérales.

Material did not come in contact with mercury while in our possession./Par les présentes, nous certifions que le matériel couvert par ce rapport n'a touché le mercure.
JOANNE DESPRES

Joanne Despres

MANAGER QUALITY ASSURANCE
GÉRANT DE L'ASSURANCE QUALITÉ

EN 10204:2004-3.1

PCA-112

All bundles listed below were produced using steel from Heat 014530 issued by HAMILTON SPECIALTY B&H and were complicated from Eaton Steel Co. 1-800-368-2222

MST-HT
 NachInfoStralsbgcon
 03032800007

We hereby certify that above to be in conformity, and a true copy of said instrument is on property record in the office of the County Clerk of said County of Santa Clara.

 County Clerk of Santa Clara

Yal. 248, 398-14

FOX: 248-390-1433

1

Hamilton Specialty Bar (2007) Inc.

319 SHERMAN AVENUE NORTH
P.O. BOX 2943, HAMILTON, ONTARIO, L8N 3R5
Phone: (905)312-8550 Fax: (905)312-1819

TEST REPORT/RAPPORT D'EXAMEN

Customer code : 050415
Cust. Order No.: 155757
Cust. Part No.: 1003613

Date : 2016-04-02

Vendor/Vendeur:

HAMILTON SPECIALTY BAR (2007)
INC.
319 SHERMAN AVENUE NORTH
P.O. BOX 2943
HAMILTON ON L8N 3R5

Sold to/Vendu à:

EATON STEEL CORPORATION
10221 CAPITAL AVENUE
OAK PARK MI 48237
USA

Ship to/Livrer à:

EATON STEEL CORPORATION
C/O SUPER STEEL TREATING CO.
6227 RINKE
WARREN MI 48091
USA

DAS

IPO: 18870

Heat: 014580

RDD: Rounds

Dimensions : 1.5000 in

Cust Grade Length: 216.000 in
4140ME

Chemical Analysis

C	Mn	P	S	Si	Cu	Cr	Mo	Ni	Nb	V	Al	Cl	Ca	N
0.40	0.82	0.022	0.023	0.23	0.20	0.85	0.174	0.12	0.003	0.008	0.024	4.53	0.0017	0.009

Jominy end-quench

J01	J02	J03	J04	J05	J06	J07	J08	J09	J10	J11	J12	J14	J16	J18	J20	J22	J24	J26	J28	J30	J32
56	56	56	56	56	56	51	50	49	47	46	45	42	40	39	38	37	36	35	34	33	32

Comments

Reduction Ratio: 22

THIS MATERIAL WAS MELTED AND ROLLED IN CANADA

THIS MATERIAL MEETS OR EXCEEDS CLEANLINESS RATING OF

S-4 O-4 ACCORDING TO J422 LATEST REVISION.

THIS MATERIAL MEETS OR EXCEEDS GRAIN SIZE 5 OR FINER AS PER ASTM E112 AND CONFORMS TO A122/A304/A29/A29M LATEST REVISION

ASTM E381-01: S-1 R-1 C-1

This material was not exposed to moisture or any other liquid or gas during processing or while in Hamilton Specialty Bar (2007) Inc. possession. The material was not subjected to any heat treatment or any other process. The material was produced in an electric arc furnace. Customer's special order. This was noted and noted in Canada. Customer's special order. This was noted and noted in Canada.

R7-035 REV 01

Peter Kourakis, QA Technician



Super Steel Treating
8227 Route Ave
Warren MI 48091
(586) 755-9140
ISO 9001:2008 Registered

Quality Report

Date	Q.C. ID No.
04/21/16	W03R144392

Customer: EAYON STEEL CORP

Metallurgist: JMR

Metallurgical Certification

Customer: EAYON STEEL CORP
Grade: 4140
Size: 1.5000
Heat No: 014580
Receiver: BR144392
Cust PO: 155758
Mill Notes:
Our Part: EAYOS600
Cust Part: 9253

Furnace Process: 2
Date Processed: 04/21/16
Accepted Weight: 46390
Accepted Qty: 5
MIL: BSB
Release No:
Process TY: 12A

Representative Sampling

Sample	Coil ID#	Decarb	FT	-- Mid Radius --	--- Surface ---	Microstructure			
				EDS	ENC	MS	ENC	ED	
262052		0.002			1.95				100x PEARLITE
Coil/Bundle ID:	0145800027	0145800028	0145800029	0145800030					
	0145800031								

NO#795554

cut 403932

CU. 56 105
CERTIFICATE OF TEST
CERTIFICAT D'ESSAIS

DART

Page 01 of 02

Certification Date
 25-OCT-2017

CUSTOMER ORDER NUMBER
 NUMÉRO DE COMMANDE DU CLIENT

Invoice Number
 T371737

AC00010312
 PART NUMBER/NUMÉRO DE PIÈCE
 513244

SOLD TO: ACIER OUELLETTE INC. SHIP TO: ACIER OUELLETTE INC.
 VENDU À: DIVISION SALABERRY DE VALLEYFIELD DIVISION SALABERRY DE VALLEYFIELD
 935, BOUL. DU HAVRE 935, BOUL. DU HAVRE
 SALABERRY-DE- VALLEYFIELD QC J6S 5L1 SALABERRY-DE- VALLEYFIE QC J6S

Description: 7075-T651 CF BAR AMS QQ A 225/9, QQ A 225/9
 1-3/4 RD X 12" Line Total: 35 LB
 HEAT: 10059056 ITEM: 513244

Specifications:
 QQ A 225/9 E ASTM B211 12 AMS 4123 H
 AMS 4122 L AMS QQ A 225/9 A ISO 9001

ALUMINIUM CHEMICAL ANALYSIS

DESCRIPTION:

	SI	FE	CU	MN	MG	CR	ZN	TI
MIN			1.2		2.1	0.18	5.1	
MAX	0.4	0.5	2.0	0.3	2.9	0.28	6.1	0.2

OTHERS : EACH TOTAL
 0.05 0.15 AL REMAINDER

RCPT: R932320

COUNTRY OF ORIGIN : USA

MECHANICAL PROPERTIES

DESCRIPTION	YLD STR KSI	ULT TEN KSI	%ELONG IN 02 IN	%RED IN AREA	HARDNESS
	74.2	81.2	16.0		
	75.5	82.4	16.0		

17/11/02

The above data were transcribed from the manufacturer's Certificate of Test after verification for completeness and specification requirements of the information on the certificate. All test results remain on file subject to examination. /Les informations ci-haut-mentionnées sont transcrites du certificat d'essais du manufacturier après vérification de l'état complet des spécifications inscrites sur le certificat. We hereby certify that the material covered by this report will meet the applicable requirements described herein, including any specification forming a part of the description. /Par les présentes, nous certifions que le matériel couvert par ce rapport rencontre les spécifications décrites ci-haut.

The willful recording of false, fictitious, or fraudulent statements in connection with test results may be punishable as a felony under federal statutes. /Les informations fausses, fictives ou frauduleuses en rapport avec le résultat des essais sont punissables en vertu des lois fédérales.

Material did not come in contact with mercury while in our possession. /Par les présentes, nous certifions que le matériel couvert par ce rapport rencontre les spécifications décrites ci-haut.

Joanne Despres

MANAGER QUALITY ASSURANCE
 GÉRANT DE L'ASSURANCE QUALITÉ

CERTIFICATE OF TEST CERTIFICAT D'ESSAIS

Page 02 of 02

Certification Date
25-OCT-2017

CUSTOMER ORDER NUMBER
NUMÉRO DE COMMANDE DU CLIENT

AC00010312

Invoice Number
T371737

PART NUMBER/NUMÉRO DE PIÈCE
513244

SOLD TO:	ACIER OUELLETTE INC.	SHIP TO:	ACIER OUELLETTE INC.
VENDU À:	DIVISION SALABERRY DE VALLEYFIELD	EXPÉDIÉ À:	DIVISION SALABERRY DE VALLEYFIELD
	935, BOUL. DU HAVRE		935, BOUL. DU HAVRE
	SALABERRY-DE- VALLEYFIELD QC J6S 5L1		SALABERRY-DE- VALLEYFIE QC J6S

Description: 7075-T651 CF BAR AMS QQ A 225/9, QQ A 225/9
1-3/4 RD X 12' Line Total: 35 LB

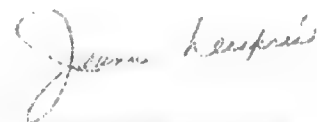
HEAT: 10059056 ITEM: 513244

MATERIAL IS FREE FROM MERCURY CONTAMINATION

The above data were transcribed from the manufacturer's Certificate of Test after verification for completeness and specification requirements of the information on the certificate. All test results remain on file subject to examination. /Les informations ci-haut-mentionnées sont transcrites du certificat d'essais du manufacturier après vérification de l'état complet des spécifications inscrites sur le certificat. We hereby certify that the material covered by this report will meet the applicable requirements described herein, including any specification forming a part of the description. /Par les présentes, nous certifions que le matériel couvert par ce rapport rencontre les spécifications décrites ci-haut.

The willful recording of false, fictitious, or fraudulent statements in connection with test results may be punishable as a felony under federal statutes. /Les informations fausses, fictives ou frauduleuses en rapport avec le résultat des essais sont punissables en vertu des lois fédérales.

Material did not come in contact with mercury while in our possession. /Par les présentes, nous certifions que le matériel couvert par ce rapport rencontre les spécifications décrites ci-haut.



MANAGER QUALITY ASSURANCE
GÉRANT DE L'ASSURANCE QUALITÉ

TEL: 0571-22671669, FAX: 0571-22671661

WORK TEST CERTIFICATE

GoDuck

HUNT NO. COOL NO. 1 (P. 8866) D-1-BL-101 - 686871

88

Dimensions: 872 PCS (274 X 3, 169 X 1)

TEST : 10014 LMS= 5770

MECHANICAL PROPERTIES

	C%	Mn%	Si% max.	P% max.	Al%	SP%	W%	Tensile strength (load mts.)	Yield Strength (proof) mts.	EL % mts.	Hardness (RHS) mhs.
RECEIVED	0.18 0.25	0.30 0.80	0.018	4.255	-	-	-	65000	68000	10%	78
ACTUAL	0.317	0.580	0.008	0.018	0.048	0.084	0.0080	9718	74681	22%	88 88

Stratigraphic : 0.52073.0' W.12. passed

Bacterial Counts : Fully Killed

This is to certify that the material supplied conforms to all requirements as specified by the customer. This test certificate conforms to EN 10204-2.1

NOT A Material competitive to European Environmental Legislation-Fulls Directs 2012/05/02

COUNTRY OF ORIGIN

•

(FOR EQUIPMENT INVESTING)

1. The first step is to identify the problem.

Illustration 1

CERTIFICATION TYPIQUE D'ANALYSE

AISI TYPE
4140 RD - HT# DL13107201

. 625 DIA.

9.00
DIA.

26 octobre 2017

ACIER OUELLETTE - VALLEYFIELD
935, boul. du Havre
Valleyfield, QC J6S 5L1

Attn. À Qui de Droit

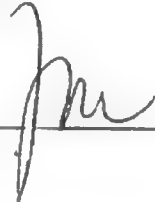
Ref. PO AC-10291 / Facture # 30870

Acier Fusion certifié par la présente, que le matériel décrit ci-haut rencontre les limites chimiques suivantes:

Typical Analysis

C	Mn	Si	Cr	Mo
0.370/0.440	0.650/1.100	0.150/0.350	0.750/1.200	0.150/0.250

BHN : 269 - 302



Chemical certification
Certification chimique

Order Num / No. Commande AC-10291	Vendor / Fournisseur 29	Country of origin / Pay d'origine USA	Date 01/20/16	Heat / coulée ⁹ NF14203087	Material ID # / No. matériau
Grade / Nuance 4140 RD	Conditions ANNEALED				
Shape / Forme RD	Size / Dimension 1.000	Specifications ASTM A193-14 GR B7, A29-12, A322-12, A434-06			

Chemical composition / Analyse chimique				
Carbon (C)	Silicon (Si)	Manganese (Mn)	Phosphorus (P)	
Mini / maxi 0.3700 / 0.4400	0.1500 / 0.3500	0.6500 / 1.1000	0.0000 / 0.0000	
Actuel % 0.430	0.310	0.920	0.009	
Sulphur (S)	Chromium (Cr)	Nickel (Ni)	Molybdenum (Mo)	
Mini / maxi 0.0000 / 0.0000	0.7500 / 1.2000	0.0000 / 0.0000	0.1500 / 0.2500	
Actuel % 0.025	0.950	0.090	0.170	
Copper (Cu)	Vanadium (V)	Aluminum (Al)	Tungsten (W)	
Mini / maxi 0.0000 / 0.0000	0.0000 / 0.0000	0.0000 / 0.0000	0.0000 / 0.0000	
Actuel % 0.160	0.004	0.027	0.000	
Cobalt (Co)	Titanium (Ti)	Cb	Sn	Ca
Mini / maxi 0.0000 / 0.0000	0.0000 / 0.0000	0.0000 / 0.0000	0.0000 / 0.0000	0.0000 / 0.0000
Actuel % 0.000	0.001	0.002	0.007	0.001
Mechanical properties / Propriétés Mécaniques				
Yield strenght / Élasticité	Tensile / Rés. à la traction	Elongation / Allon. (%)	Red. of area / Surface (%)	RC
149.239 PSI	125.527 PSI	19.70	56.00	
				Surface Hd / Dureté BHN

Note:

We certify that the above data has been verified and are conform to an original mill or supplier certificate supplied to us with the material

Nous certifions que les données ci haut ont été vérifier et sont conformes d'après un certificat originale qui nous a été fourni par notre fournisseur


 Prepared by: / Préparé par:

56725

DART

PO, 10242

ACIER OUELLETTE DIV. VALLEYFIELD
 PLAQUE ALUMINIUM 6061-T651
 .50" THICK X 7.0000" X 72.0000"
 PART NO.

PO/Ref AC00818292/00010299

Nous certifions que le document reproduit ici est
 une copie conforme du rapport fourni par le
 fournisseur du matériel ou les données résultent

Certificate of Mill Test Results

BL VIM-524921-001

24Oct17

de l'analyse faite par un laboratoire qualifié.
 SIGNE PAR:

Pg 1/4



INSPECTION CERTIFICATE № 17.12.1473

EN 10204 - 3.1

Consignor: KAMENSK URALSKY METALLURGICAL WORKS 5, Zavodskaya Str., Kamensk Ural'sky, Sverdlovsk Region, 623400, Russia Tel: +7 (3438) 39 54 17 Fax: +7 (3439) 39 62 49											
P.O. No: VIM-641201 Article No:					Quantity, pcs: 6 Net Weight, kg: 839 S.D. No: N17083 Item No: 1.2 Package No: 729303						
Description of Goods: Plates Grade of Product:					Dimensions, inch (mm): 0.5"x48.5"x98.5" 12.700x1231.80x2451.1						
Requirements on the Products: Material conforms to quality of alloy: 6061 T651					Product conforms to all requirements of: ASTM B209-14; SAE AMS-OC-A-250/11A (2008); SAE AMS 4027 Rev. N (2014). This product conforms to European Union RoHS Directive 2011/65/EU						
Mechanical Properties											
The Condition of Tested Standards	Lot No.	Heat lot No.	MT Charge No.	Sampling direction	Tensile Strength, Rm / Cst		Yield Strength, Rp0.2% /		Elongation, %		Hardness, HBW
					min	max	min	max	min	max	
Required	647106	13-2217		LT	42.0		33.0		9		
				LT	48.6	47.3	42.7	43.8	13.1	16.1	
Chemical Composition, %											
Element	Silicon Si	Iron Fe	Copper Cu	Manganese Mn	Magnesium Mg	Chromium Cr	Zinc Zn	Titanium Ti			
Required	0.40 - 0.8		0.7	0.16 - 0.40	0.15	0.8 - 1.2	0.04 - 0.35	0.25	0.15		
Consent	0.62 - 0.64	0.33 - 0.34	0.18	0.08	1.0	0.06	0.12	0.08 - 0.09			
Element									Other Elements		
Required									Each	Total	
Consent									0.05	0.15	
									0.05	0.15	
Other Tests											
Method	Macro-structure	Micro-structure	UT	K10	Electro-conductivity, ACS%	SCP	Content of oil	Raw material used for manufacturing supplied products was tested for compliance with international radiation safety regulations during incoming inspection. Russia is country of melt and manufacture. No weld repair.			
Result							0.25				

On behalf:

Date:

QCB Inspector

Inspection Department Engineer



KUMZ J.S.Co.

17.06.2017

Gurava V.N.

Alekina N.V.

Form № QAD/3-003, Revision 03



DESIGN 17	DRAWN BY 17	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED 17	APPROVED 17	DRAWING NO. M4140N-B	REV. A SHEET 1 OF 1
DATE 05.01.19		TITLE 4140 BAR	SCALE NTS
A	05.01.19	NEW ISSUE	

RELEASED
17 05.01.21

PURCHASE MATERIAL : AISI 4140N STEEL BAR
PER MIL-S-5626 , AISI 6382 , AMS 6349 , AMS 6529

PART NUMBER : M4140N-E | T.TTT | x | WW.WWW | WHERE T.TTT = THICKNESS (IN INCHES)
THICK | WIDTH | WW.WWW = WIDTH (IN INCHES)

EG. 0.5" x 4.0" BAR = M4140N-B0.500 x 04.000

.500 x .500

Copyright © 2005 by DART AEROSPACE LTD

THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.

MATERIAL RECEIPT INSPECTION FORM

MATERIAL: M707ST6 R 1.750

PO / BATCH NO.: 038050/

DATE: 17/11/02

MATERIAL CERT REC'D: yes
 QUANTITY RECEIVED: 12'
 QUANTITY INSPECTED: 12'
 QUANTITY REJECTED: _____

THICKNESS ORDERED: 1.750
 THICKNESS RECEIVED: 1.750
 SHEET SIZE ORDERED: _____
 SHEET SIZE RECEIVED: _____

DESCRIPTION	NCR (Check Y/N)		COMMENTS
SURFACE DAMAGE	Y	N	
CORRECT FINISH	Y	N	
CORROSION	Y	N	
CORRECT GRAIN DIRECTION	Y	N	
CORRECT MATERIAL PER M-DRAWING	Y	N	AMS QD-A-22519
CORRECT THICKNESS	Y	N	
PHOTO REQUIRED	Y	N	
CORRECT REF # TO LINK CERT	Y	N	HEAT # 10059056
CORRECT MATERIAL IDENTIFICATION	Y	N	707ST6
CORRECT M# ON THE MATERIAL	Y	N	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y	N	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y	N	

CUT SAMPLE PIECE OF MATERIAL AND PERFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
	HRC	HRB	DUR A	DUR D	WEBSTER
TYPE OF MATERIAL					
SIZE OF TEST SAMPLE					
HARDNESS / DUROMETER READING					

testers located in the Quality Office

QC 18 INSPECTION		ENGINEERING SIGNOFF (if required)	
INSPECTED BY: <u>OMK</u>		SIGNED OFF BY: _____	
DATE: <u>17/11/02</u>		DATE: _____	

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in



DESIGN <i>BC</i>	DRAWN BY <i>BC</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>B</i>	APPROVED <i>[Signature]</i>	DRAWING NO. M7075T6R	REV. A SHEET 1 OF 1
DATE 07.07.12		TITLE 7075-T6 ROUND BAR	SCALE NTS
A	07.07.12	NEW ISSUE	

RELEASED
07.11.26

PURCHASE MATERIAL: 7075-T6 (OR T651/T6510/T6511/T652/T62) ROUND BAR
PER AMS-QQ-A-225/9 (OR AMS 4122/4123/4124/4186/4187) OR
PER AMS-QQ-A-200/11

PART NUMBER: M7075T6RD.DDD WHERE D.DDD = DIAMETER (IN INCHES)

EG. 5/8 ROUND BAR = M7075T6R0.625

1.750

Copyright © 2007 by DART AEROSPACE LTD

THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.

MATERIAL RECEIPT INSPECTION FORM

MATERIAL: M606IT6 B050X7.00

PO / BATCH NO.: 38050/

DATE: 17/11/02

MATERIAL CERT REC'D: yes
 QUANTITY RECEIVED: 6
 QUANTITY INSPECTED: 6
 QUANTITY REJECTED: _____

THICKNESS ORDERED: .500
 THICKNESS RECEIVED: .500
 SHEET SIZE ORDERED: _____
 SHEET SIZE RECEIVED: _____

DESCRIPTION	NCR (Check Y/N)	COMMENTS
SURFACE DAMAGE	Y (N)	
CORRECT FINISH	(Y) N	
CORROSION	Y (N)	
CORRECT GRAIN DIRECTION	(Y) N	
CORRECT MATERIAL PER M-DRAWING	(Y) N	
CORRECT THICKNESS	(Y) N	
PHOTO REQUIRED	Y (N)	
CORRECT REF # TO LINK CERT	(Y) N	HEAT # 13-2217
CORRECT MATERIAL IDENTIFICATION	(Y) N	M606IT6
CORRECT M# ON THE MATERIAL	(Y) N	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y (N)	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y (N)	

CUT SAMPLE PIECE OF MATERIAL AND PERFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
	HRC	HRB	DUR A	DUR D	WEBSTER
TYPE OF MATERIAL					
SIZE OF TEST SAMPLE					
HARDNESS / DUROMETER READING					

testers located in the Quality Office

QC 18 INSPECTION	ENGINEERING SIGNOFF (if required)
INSPECTED BY: _____ DATE: _____	SIGNED OFF BY: _____ DATE: _____

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

SPECIFICATION CONTROL DRAWING

PURCHASE MATERIAL: 6061-T6/T651/T6510/T6511/T62 ALUMINUM BAR

△ SPECIFICATION: QQ-A-225/8 OR AMS-QQ-A-225/8 (OR AMS 4117/4128/4115/4116)
OR QQ-A-200/8 OR AMS-QQ-A-200/8 (OR AMS 4160)
OR ASTM B211 OR ASTM B221

PART NUMBER:

M6061T6B | T.TTT | X | WW.WWW/
THICK | WIDTH

WHERE "T.TTT" = THICKNESS IN INCHES
"WW.WWW" = WIDTH IN INCHES

E.G. 1.0" X 12.0" BAR = M6061T6B1.000X12.000

RELEASED
2009-05-03
MJD

B	REMOVE QQ-A-250/11 OPTION, REFORMAT NOTES, ADD ASTM B211/B221 (END OF 11)	CP	08.07.13
A	NEW ISSUE	DS	01.08.08
REV	DESCRIPTION	BY	DATE
DESIGN	DS		
DRAWN	DS		
CHECKED	DS		
MFG. APPR.	DS		
APPROVED	DS		
DE APPR.	DS		
DATE	08.07.13		

DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWING NO.	M6061T6B
TITLE	6061-T6 BAR
REV. B	SHEET 1 OF 1
SCALE	NTS

THIS DOCUMENT IS THE PROPERTY OF DART AEROSPACE LTD. IT IS TO BE USED ONLY FOR THE PURPOSES FOR WHICH IT WAS ISSUED. IT IS NOT TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM, WITHOUT THE WRITTEN PERMISSION OF DART AEROSPACE LTD.

MATERIAL RECEIPT INSPECTION FORM

MATERIAL: MT 4140QT R1
 DATE: 12.11.15

PO / BATCH NO.: 038055 / 5007126

MATERIAL CERT REC'D: yes
 QUANTITY RECEIVED: 10
 QUANTITY INSPECTED: 10
 QUANTITY REJECTED: 0

THICKNESS ORDERED: 1"
 THICKNESS RECEIVED: 1"
 SHEET SIZE ORDERED: N/A
 SHEET SIZE RECEIVED: N/A

DESCRIPTION	NCR (Check Y/N)		COMMENTS
SURFACE DAMAGE	Y	<input checked="" type="radio"/> N	
CORRECT FINISH	<input checked="" type="radio"/> Y	N	
CORROSION	Y	<input checked="" type="radio"/> N	
CORRECT GRAIN DIRECTION	<input checked="" type="radio"/> Y	N	
CORRECT MATERIAL PER M-DRAWING	<input checked="" type="radio"/> Y	N	
CORRECT THICKNESS	<input checked="" type="radio"/> Y	N	
PHOTO REQUIRED	Y	<input checked="" type="radio"/> N	
CORRECT REF # TO LINK CERT	<input checked="" type="radio"/> Y	N	UF14203057
CORRECT MATERIAL IDENTIFICATION	<input checked="" type="radio"/> Y	N	MT 4140QT R1
CORRECT M# ON THE MATERIAL	<input checked="" type="radio"/> Y	N	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y	<input checked="" type="radio"/> N	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y	<input checked="" type="radio"/> N	

CUT SAMPLE PIECE OF MATERIAL AND PREFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
	HRC	HRB	DUR A	DUR D	WEBSTER
TYPE OF MATERIAL					
SIZE OF TEST SAMPLE					
HARDNESS / DUROMETER READING					

testers located in the Quality Office

QC 18 INSPECTION	ENGINEERING SIGNOFF (if required)
INSPECTED BY: <u>9</u> DATE: <u>12.11.15</u>	SIGNED OFF BY: _____ DATE: _____

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

SPECIFICATION CONTROL DRAWING

PURCHASE MATERIAL : AISI 4140 QUENCHED & TEMPERED STEEL ROUND BAR
SPECIFICATION: ASTM 4140 QT or ASTM 4142 QT
PART NUMBER: MT-4140QT-R [D.DDD]
WHERE "D.DDD" = DIAMETER IN INCHES
EG. 5/8" ROUND BAR = MT-4140QT-R0.625

REV.	DESCRIPTION	DATE	BY	APPROVED
A	NEW ISSUE	17.09.12	VM	WM

DART AEROSPACE Headhunting, Ontario, Canada	
TITLE AISI 4140 Q&T ROUND BAR	
DWG NO	REV
MT-4140QT-R	A
DESIGN BY: VM 09/14/2017	FRAGMENTS: 10
DRAWN BY: VM 09/14/2017	XX ± .01
CHECKED: VM 09/14/2017	XX ± .01
QA APPR: VM 09/14/2017	XX ± .01
DATE: 9/14/2017	SCALE: NTS WEIGHT: 0.0 LBS
SHEET 1 OF 1	
COPYRIGHT © 2017 BY DART AEROSPACE LTD	
THIS DOCUMENT IS PREPARED BY DART AEROSPACE LTD. IT IS THE PROPERTY OF DART AEROSPACE LTD. AND IS NOT TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM, WITHOUT PERMISSION IN WRITING FROM DART AEROSPACE LTD.	

ECW 17-655

MATERIAL RECEIPT INSPECTION FORM

MATERIAL: MT A513-70500W-065

PO / BATCH NO.: 038050/5007127

DATE: 17.11.15

MATERIAL CERT REC'D: yes

THICKNESS ORDERED: .065

QUANTITY RECEIVED: 20

THICKNESS RECEIVED: .065

QUANTITY INSPECTED: 20

SHEET SIZE ORDERED: N/A

QUANTITY REJECTED: 0

SHEET SIZE RECEIVED: N/A

DESCRIPTION	NCR (Check Y/N)		COMMENTS
SURFACE DAMAGE	Y	(N)	
CORRECT FINISH	(Y)	N	
CORROSION	Y	(N)	
CORRECT GRAIN DIRECTION	(Y)	N	
CORRECT MATERIAL PER M-DRAWING	(Y)	N	
CORRECT THICKNESS	(Y)	N	
PHOTO REQUIRED	Y	(N)	
CORRECT REF # TO LINK CERT	(Y)	N	F626891
CORRECT MATERIAL IDENTIFICATION	(Y)	N	MT A513-70500W-065
CORRECT M# ON THE MATERIAL	(Y)	N	5007127
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y	(N)	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y	(N)	

CUT SAMPLE PIECE OF MATERIAL AND PERFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
	HRC	HRB	DUR A	DUR D	WEBSTER
TYPE OF MATERIAL					
SIZE OF TEST SAMPLE					
HARDNESS / DUROMETER READING					

testers located in the Quality Office

QC 18 INSPECTION	ENGINEERING SIGNOFF (if required)
INSPECTED BY: <u>9</u> DATE: <u>17.11.15</u>	SIGNED OFF BY: _____ DATE: _____

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

REV.	DESCRIPTION	DATE	BY	APPROVED
A	NEW ISSUE	17/09/06	VM	WMI

SPECIFICATION CONTROL DRAWING

PURCHASE MATERIAL: ASTM A513 SEAMLESS ALLOY STEEL ROUND TUBING (DOM)

SPECIFICATION:

ASTM A513

PART NUMBER:

MT-A513-T-10.DDDJMT.TTT

WHERE D.DDD IS OUTSIDE DIAMETER IN INCHES

WHERE T.TTT IS WALL THICKNESS IN INCHES

EG. 3/4" ROUND TUBING WITH .120" WALL THICKNESS = MT-A513-T-0.750WD.120

TOLERANCES PER MANUFACTURER SPECIFICATIONS

DART		DESIGNER		DATE	
TITLE		ASTM A513 ALLOY STEEL		DATE	
ROUND TUBING (DOM)		MT-A513-T		DATE	
REV		REV		DATE	
DESIGNER		SAC 7/8/2017		DATE	
DRAWN BY		VM 08/12/2017		DATE	
CHECKED BY		VM 08/12/2017		DATE	
APPROVED BY		PD 08/12/2017		DATE	
SCALE		N/A		DATE	
DATE		8/12/2017		DATE	
SHEET 1 OF 1		SHEET 1 OF 1		SHEET 1 OF 1	

THE DRAWING IS PROPERTY OF DART AND IS NOT TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, WITHOUT PERMISSION IN WRITING FROM DART.

COPYRIGHT © 2017 BY DART AEROSPACE LTD

640 17-655

MATERIAL RECEIPT INSPECTION FORM

MATERIAL: MT. 4140QT-RD625

PO / BATCH NO.: 088050 / 5007115

DATE: 11.15

MATERIAL CERT REC'D: yes
 QUANTITY RECEIVED: 10'
 QUANTITY INSPECTED: 10'
 QUANTITY REJECTED: 0

THICKNESS ORDERED: .625"
 THICKNESS RECEIVED: .625"
 SHEET SIZE ORDERED: N/A
 SHEET SIZE RECEIVED: N/A

DESCRIPTION	NCR (Check Y/N)	COMMENTS
SURFACE DAMAGE	Y (N)	
CORRECT FINISH	(Y) N	
CORROSION	Y (N)	
CORRECT GRAIN DIRECTION	(Y) N	
CORRECT MATERIAL PER M-DRAWING	(Y) N	
CORRECT THICKNESS	(Y) N	
PHOTO REQUIRED	Y (N)	
CORRECT REF # TO LINK CERT	(Y) N	DL13107201
CORRECT MATERIAL IDENTIFICATION	(Y) N	MT 4140 QT RD625
CORRECT M# ON THE MATERIAL	(Y) N	5007115
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y (N)	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y (N)	

CUT SAMPLE PIECE OF MATERIAL AND PREFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
	HRC	HRB	DUR A	DUR D	WEBSTER
TYPE OF MATERIAL					
SIZE OF TEST SAMPLE					
HARDNESS / DUROMETER READING					

testers located in the Quality Office

QC 18 INSPECTION	ENGINEERING SIGNOFF (if required)
INSPECTED BY: <u>9</u> DATE: <u>11.15</u>	SIGNED OFF BY: _____ DATE: _____

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

SPECIFICATION CONTROL DRAWING

PURCHASE MATERIAL : AISI 4140 QUENCHED & TEMPERED STEEL ROUND BAR
SPECIFICATION: ASTM 4140 QT or ASTM 4142 QT
PART NUMBER: MT-4140QT-R [D.DDD]
WHERE "D.DDD" = DIAMETER IN INCHES
EG. 5/8" ROUND BAR = MT-4140QT-R0.625

DART AEROSPACE Hamilton, Ontario, Canada	
TITLE: AISI 4140 Q&T ROUND BAR	
PART NO.: MT-4140QT-R	
REV: A	
DESIGN BY: VM 8/8/2017	CHK: JAC 8/8/2017
DRAWN BY: VM 8/8/2017	CHK: JAC 8/8/2017
CHECKED: VM 09/14/2017	1. DIMENSIONS ARE IN INCHES UNLESS OTHERWISE SPECIFIED
DATE: 09/14/2017	2. UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE TO THE CENTERLINE OF THE PART
APPROVED: VM 09/14/2017	3. DIMENSIONS IN PARENTHESES APPLY
DATE: 9/14/2017	SCALE: NTS WEIGHT: 0.0 LBS SHEET 1 OF 1
COPYRIGHT © 2017 BY DART AEROSPACE LTD.	
THIS DOCUMENT IS UNCLASSIFIED AND IS RELEASED ON THE CONDITION THAT IT BE NOT TO BE USED FOR ANY PURPOSE OR TO BE REPRODUCED IN ANY MANNER WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

ECW 17-655

MATERIAL RECEIPT INSPECTION FORM

MATERIAL: MT-4140-R1.500
DATE: 12.11.15

PO / BATCH NO.: 038050/5007114

MATERIAL CERT REC'D: yes
QUANTITY RECEIVED: 12'
QUANTITY INSPECTED: 12'
QUANTITY REJECTED: 0

THICKNESS ORDERED: 1.500
THICKNESS RECEIVED: 1.500
SHEET SIZE ORDERED: N/A
SHEET SIZE RECEIVED: N/A

DESCRIPTION	NCR (Check Y/N)	COMMENTS
SURFACE DAMAGE	Y (N)	
CORRECT FINISH	(Y) N	
CORROSION	Y (N)	
CORRECT GRAIN DIRECTION	(Y) N	
CORRECT MATERIAL PER M-DRAWING	(Y) N	
CORRECT THICKNESS	(Y) N	
PHOTO REQUIRED	Y (N)	
CORRECT REF # TO LINK CERT	(Y) N	<u>D14580</u>
CORRECT MATERIAL IDENTIFICATION	(Y) N	
CORRECT M# ON THE MATERIAL	(Y) N	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y (N)	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y (N)	

CUT SAMPLE PIECE OF MATERIAL AND PERFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
	HRC	HRB	DUR A	DUR D	WEBSTER
TYPE OF MATERIAL					
SIZE OF TEST SAMPLE					
HARDNESS / DUROMETER READING					

testers located in the Quality Office

QC 18 INSPECTION		ENGINEERING SIGNOFF (if required)	
INSPECTED BY: <u>9-89</u>	SIGNED OFF BY: _____		
DATE: <u>12.11.15</u>	DATE: _____		

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

REV.	DESCRIPTION	DATE	BY	APPROVED
A	NEW ISSUE	17.09.20	SAC	WM

SPECIFICATION CONTROL DRAWING

PURCHASE MATERIAL : AISI 41L40 STEEL ROUND BAR
SPECIFICATION: AISI 41L40
PART NUMBER: MT-41L40-R [D.DDD]
WHERE "D.DDD" = DIAMETER IN INCHES
EG, 5/8" ROUND BAR = MT-41L40-R0.625

DART AEROSPACE		Innovation. Quality. Canada	
TITLE AISI 41L40 LEADED STEEL ROUND BAR			
PART NO. MT-41L40-R			
DESIGN BY:	SAC 2008/2012	XXX 2 205	FRACTIONS 3 1/8
DRAWN BY:	SAC 08/20/2012	XX 3 31	SURFACES 1/8
CHECKED:	VM 09/21/2017	1. DIMENSIONS ARE IN INCHES	
APPROVED:	DD 09/21/2017	2. HATCHES ARE TO BE USED	
DATE:	2008/2017	3. DIMENSIONS ARE TO BE USED	
SCALE:	NTS	WEIGHT:	N/A
SHEET 1 OF 1			

COPYRIGHT © 2017 BY DART AEROSPACE LTD.
ALL RIGHTS RESERVED. NO PART OF THIS DRAWING MAY BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, WITHOUT PERMISSION IN WRITING FROM DART AEROSPACE LTD.